

REMARKS

1. In response to the Office Action mailed October 31, 2007, Applicant respectfully requests reconsideration. Claims 18-34 were last presented for examination. In the outstanding Office Action, claims 18-30 were rejected, and claims 1-17 and 31-34 were withdrawn from consideration. By the foregoing Amendments, claims 18 and 31 have been amended to recite "by" in place of "between" for purposes of clarification and not to limit the scope of the claims. No new matter has been added. Claim 35 has been added and no claims have been cancelled. Upon entry of this paper, claims 18-30 and 35 will be pending in this application. Of these fourteen (14) claims, 1 claim (claim 18) is independent.

2. Based upon the above Amendment and following Remarks, Applicant respectfully requests that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

3. Applicant acknowledges receipt of form PTO-892 listing additional references identified by the Examiner.

4. Applicant also thanks the Examiner for returning the PTO/SB/08 forms submitted by Applicant on January 11, 2005, which has been initialed by the Examiner indicating the Examiner has considered the references cited therein.

Priority Claim

5. Applicant notes with appreciation the Examiner's acknowledgement of foreign priority under 35 U.S.C. §119.

Election/Restrictions

6. Applicant requests that previously presented claims 31-34 be considered on the merits as they are directed to a method for delivering the implant of independent claim 18 and since search and examination of claims 31-34 can be made without serious burden.

Claim Objection

7. Claim 18 has been amended above to accommodate the objection. Applicant respectfully requests that the objection be withdrawn.

Claim Rejections under §102 – Albrektsson

8. Claims 18-27, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,702,473 to Albrektsson, *et al.* (hereinafter, “Albrektsson”). Based on the following Remarks, Applicant respectfully requests reconsideration and withdrawal of these rejections.

9. As amended, independent claim 18 recites, in part, “An implant for implantation... bone comprising: at least one *outer surface having* a first cross-section *diameter configured to be at least approximately equal to* the cross-section *diameter of the bone hole*; [and] at least one *inner surface having* a second cross-section *diameter configured to be smaller than* both the cross-section *diameter of the hole* and said first cross-section diameter, wherein a *space is defined by said outer surface, said inner surface and the recipient's bone*.” (See, Applicant’s independent claim 18, as amended, above; emphasis added.)

10. Albrektsson is directed to “a cup-shaped member for a hip joint prosthesis for implantation into a cavity in the bone.” (See, Albrektsson, col. 1, ll. 5-7.) As shown in FIG. 4 of Albrektsson, cup 1 is composed of two main part: spherical segment 2 and cylindrical part 3. (See, Albrektsson, FIG. 4, col. 2, ll. 24-25.) Albrektsson states, “the outside of cylindrical part 3 is provided with a circumferential bead which is in the form of a thread 5.” (See, Albrektsson, col. 2, ll. 26-27.) Albrektsson further states that “the *entire outer surface* of the cup, *including the cylindrical part 3* and the threads 5, is roughened. The rough structure should have relatively sharp edges so as to be able to *function in a manner similar to a file*.” (See, Albrektsson, col. 2, ll. 42-47; emphasis added.) To insert cup 1 into a recipient’s bone, “a cavity is cut in the bone tissue... The shape of this cavity corresponds closely to the outer surface of the cup apart from the threads” and is made to be “*about 1 mm smaller than the diameter of the core part of the cylindrical part of the cup*.” (See, Albrektsson, col. 2, ll. 57-63; emphasis added.)

11. During insertion, Albrektsson describes initially tapping cup 1 into that formed cavity, followed by a turning of cup 1 and its threads inside the cavity. (See, Albrektsson, col. 2, ll. 63-66.) When turned, given that the bone cavity is smaller than the diameter of the cup, and given that cup 1 and its threads have a file-like roughened surface, “the inward movement of the cup in the cavity will result in that the roughness on the *exterior of the cup will act as a file*, to some extent shaping the cavity after the space of the cup.” (See, Albrektsson, col. 2, ln. 66 – col. 3, ln. 2.) Among four “aspects” provided by the above described turning of the file-like cup and threads, “the first aspect is that the *rough structure on the surface will act as a file* on the inner surface of the cavity and thereby, if necessary, *shape the cavity to conform exactly to the shape of the cup*.” (See, Albrektsson, col. 3, ll. 9-13.)

12. Applicant’s independent claim 18 is directed to an implant in which a “space is defined by said outer surface, said inner surface and the recipient’s bone” in which the recited GSS and bodily fluids interact in order to form bone in that space and thereby fix the implant in place. Unlike Applicant’s claimed invention, the implantable cup of Albrektsson is configured so that the bone cavity “conforms exactly” to the file-like walls of cup 1, thus intentionally preventing a space from being defined between its cup and the walls of the bone cavity. Thus, Albrektsson does not provide any “space” in which GSS and bodily fluids can interact and form bone. In fact, Albrektsson expressly states that both the cup and the threads are held securely in place due to their exact fit into the bone, as noted above. Accordingly, as Albrektsson fails to teach or disclose Applicant’s invention as claimed, Applicant respectfully requests that the rejections of these claims be reconsidered and that they be withdrawn.

New claim

13. For the reasons discussed above with reference to independent claim 18, Applicants submit that new claim 35 is non-obvious in light of the art of record.

Dependent claims

14. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the

art of record. Accordingly, Applicant respectfully asserts that the dependent claims are also allowable over the art of record.

Conclusion

15. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.
16. Applicant reserves the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application. Any cancellations and amendments of above claims, therefore, are not to be construed as an admission regarding the patentability of any claims and Applicant reserves the right to pursue such claims in a continuation or divisional application.
17. In the event that the Examiner believes that an interview would serve to advance the prosecution of this application, the undersigned is available at the number noted below.
18. Please charge any fees due with this response to our Deposit Account No. 22-0185, under Order No. 21547-00303-US1 from which the undersigned is authorized to draw.

Dated: January 31, 2008

Respectfully submitted,

By /Burton A. Amernick/
Burton A. Amernick
Registration No.: 24,852
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Applicant